IN THE CLAIMS:

Please cancel claims 13-21 without prejudice as follows:

1. (Original) A transgenic non-human mammal whose genome is heterozygous for a mutation engineered into the Erk5 gene, wherein in a homozygous state said mutation results in a functionally deficient Erk5 gene and embryonic death characterized by a lack of vasculogenesis and angiogenesis in said homozygous embryo.

2. (Original) A cell isolated from the transgenic non-human mammal according to claim 1, wherein said cell is isolated from said mammal at the embryonic stage or at the post partum stage.

3. (Original) A transgenic non-human mammalian embryo whose genome is homozygous for a mutation engineered into the Erk5 gene, wherein said mutation results in a functionally deficient Erk5 gene and embryonic death characterized by a lack of vasculogenesis and angiogenesis in said homozygous embryo.

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4. (Original) A cell isolated from the transgenic non-human mammalian embryo according to claim 3.

5. (Original) An isolated cell heterozygous for a mutation engineered into the Erk5 gene, wherein said mutation results in a functionally deficient Erk5 gene, wherein said cell is produced by introducing a mutated Erk5 gene into a cell containing a functional Erk5 gene.

6. (Original) A chimeric non-human mammal which comprises cells that are heterozygous for a mutation engineered into the Erk5 gene, wherein, in a homozygous state, said mutation results in a functionally deficient Erk5 gene and wherein a mammalian embryo whose genome is homozygous for said mutation is characterized by a lack of vasculogenesis and angiogenesis and a failure to survive to birth.

7. (Original) A cell isolated from the chimeric non-human mammal according to claim 6, wherein said cell is heterozygous for a defect engineered into the Erk5 gene.

8. (Original) The transgenic mammal according to claim 1, wherein said mammal is a mouse.

9. (Original) The transgenic mammalian embryo according to claim 3, wherein said embryo is a mouse embryo.

10. (Original) The chimeric mammal according to claim 6, wherein said mammal is a mouse.

11. (Original) The isolated cell according to any one of claims 2, 4, 5, or 7, wherein said cell is a mouse cell.

12. (Original) The isolated cell according to claim 11, wherein said cell is an embryonic stem cell.

13. (Presently cancelled).

14. (Presently cancelled).

15. (Presently cancelled).

16. (Presently cancelled).

17. (Presently cancelled).

18. (Presently cancelled).

19. (Presently cancelled).

20. (Presently cancelled).

21. (Presently cancelled).